

(No Model.)

G. C. HOWARD.
LAMP HEATER.

No. 545,651.

Patented Sept. 3, 1895.

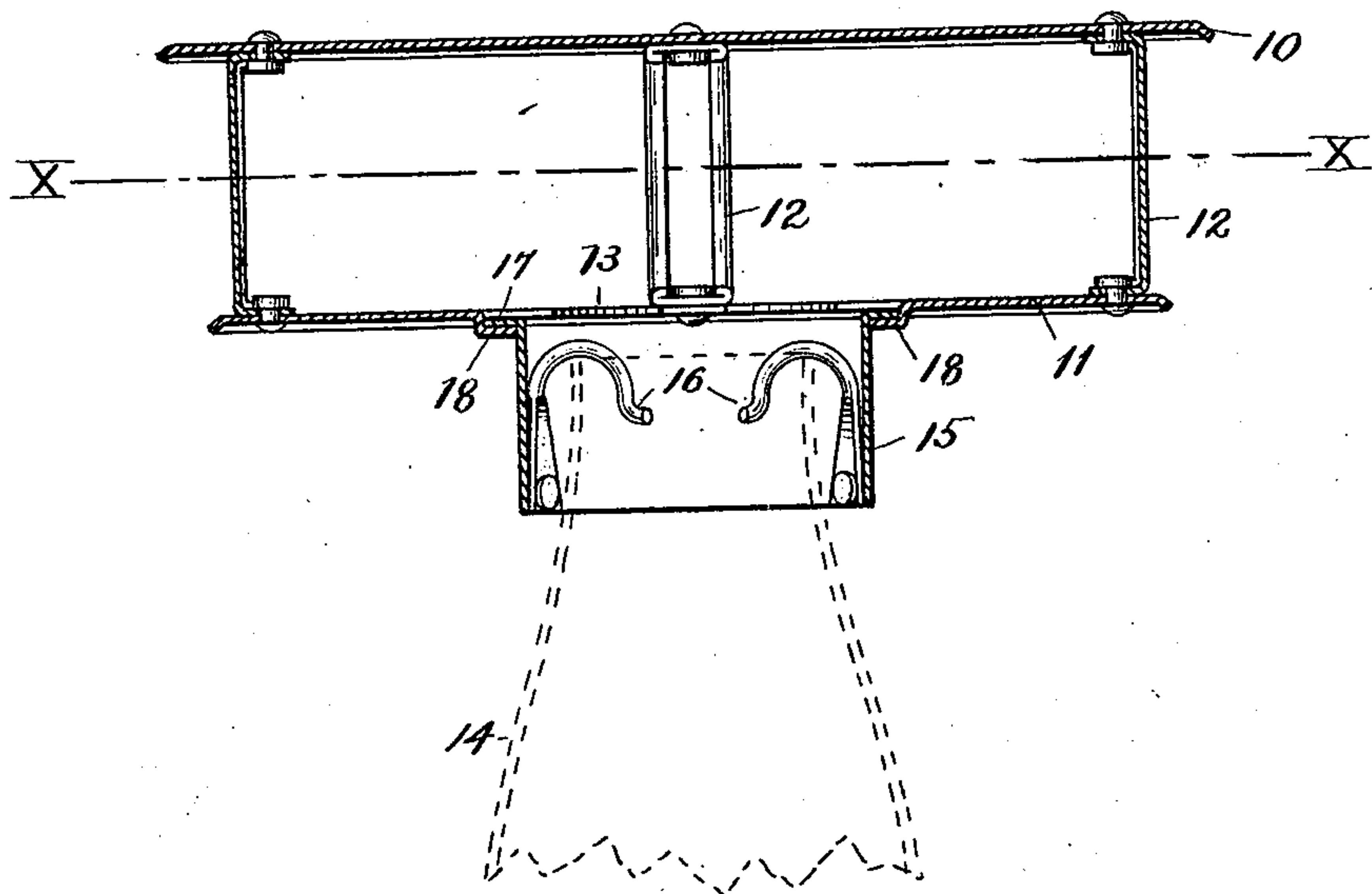
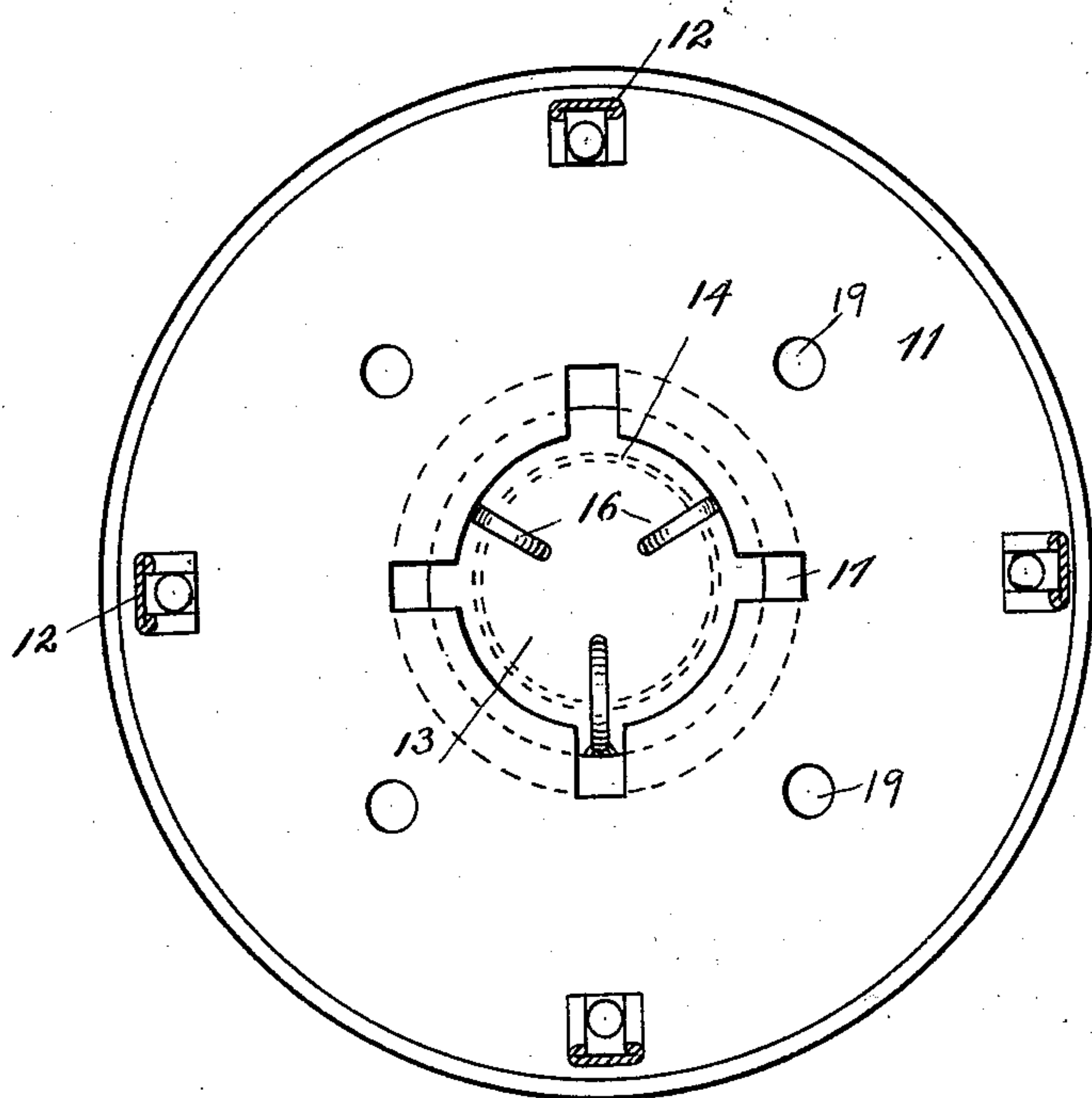


Fig. 1.



WITNESSES

Everett S. Chadwick.
Ellen B. Tomlinson.

Fig. 2. INVENTOR
George C. Howard,
by Alex. P. Browne,
att'y.

UNITED STATES PATENT OFFICE.

GEORGE C. HOWARD, OF WALTHAM, MASSACHUSETTS.

LAMP-HEATER.

SPECIFICATION forming part of Letters Patent No. 545,651, dated September 3, 1895.

Application filed December 4, 1894. Serial No. 530,770. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. HOWARD, a citizen of the United States, residing at Waltham, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Lamp-Heaters, of which the following is a specification.

My invention relates to devices such as are used in connection with ordinary lamps or gas-burners for the heating of rooms; and its object is to provide such a device which shall be simple in construction and at the same time highly efficient for its intended purpose.

In the accompanying drawings, Figure 1 represents a central vertical section of my invention shown as applied to an ordinary lamp-chimney; and Fig. 2 is a horizontal section of the same on line *xx*, Fig. 1, looking downward.

The device comprises two thin plates 10 11, preferably struck from sheet metal, which are rigidly connected to each other by a sufficient number of straps or braces 12, whereby an air-space is provided between the plates, for the purpose presently to be described. The lower plate 11 is provided at its center with a hole 13, corresponding to the opening in the top of the lamp-chimney 14. (Shown in dotted lines.) The upper plate 10 is not perforated. The heater is removably attached to the chimney by means of a collar 15, provided internally with hooks 16, arranged to hook over the top edge of the chimney. The collar 15 may be secured to the plate 11 in any desired manner. As shown in the drawings, I unite them by turning out the upper edge of the collar 15 to form a flange 17, beneath which are bent lips 18, struck from the plate 11 at the edge of the hole 13. As thus constructed,

the current of hot air rising through the chimney strikes the under side of the imperforate plate 10 and is thereby thrown laterally out between the edges of the plates, thus distributing warm air to the lower part of the room and heating it instead of allowing the warm air to rise directly to the ceiling.

I prefer to provide in the bottom plate 11 a number of holes 19, located just outside the collar 15. These holes serve to increase the volume of the circulating currents of air by allowing cold air to be drawn up into the space between the plates where it is warmed and thrown out between the edges. These holes, however, are not considered to be an essential feature of my invention.

My device is useful not only to heat the room itself, but it may also be used to heat food, water, and the like, which may be set upon the top plate 10. The plates 10 and 11, as shown, are circular, but of course are not necessarily of that form.

What I claim is—

In a lamp heater, the upper imperforate plate 10, the straps 12 connecting said plate to the lower plate 11, said plate 11 having the perforations 13 and 19, in combination with collar 15 provided with hooks 16 and the flange 17, said collar being secured to the plate 11 by means of lips 18 struck from the plate 11 and bent under the flange 17, substantially as described.

In testimony whereof I have hereunto subscribed my name this 24th day of November, A. D. 1894.

GEORGE C. HOWARD.

Witnesses:

EVERETT D. CHADWICK,
LAWRENCE M. STOCKTON.